



April 30, 2021

Mr. Austin F. Callwood, Director
Division of Environmental Protection
Department of Planning & Natural Resources
45 Mars Hill
Frederiksted, V.I. 00840-4474

SUBJECT: No. 8 Flare and East Fuel Gas H₂S Exceedance – April 25, 2021

Dear Mr. Callwood:

This letter is submitted in compliance with Condition No. 2.4.5.1 of Limetree Bay Title V permit as a follow-up to the email notifications to Ms. Verline Marcellin of the Division of Environmental Protection on April 25, 2021 at 4:31 PM regarding the H₂S exceedances at the No. 8 Flare and east fuel gas system.

The Continuous Monitoring System (CMS) at the No. 8 Flare recorded H₂S concentrations in excess of 162 ppmv based on a 3-hr rolling average (ref. Title V permit condition 3.2.5.5 & 3.2.5.6) from Sunday, April 25, 2021 from 3:00 PM – 11:00 PM. Additionally, the CMS at the east fuel gas system recorded H₂S concentrations in excess of 0.1 gr/dscf (162 ppm) based on a 3-hr rolling average (ref. Title V permit condition 3.2.2.1.10) on Sunday, April 25, 2021 from 1:00 PM – 10:00 PM.

The following table provides the 3-hr H₂S concentrations at the No. 8 Flare and the east fuel gas system during the exceedance events.

Source		EASTFGDR	FLARE08
Parameter	Unit	H2SPPM (PPM)	H2SPPMD (PPM)
04/25/21	11:00	59	75.1
04/25/21	12:00	106	80.0
04/25/21	13:00	183	81.5
04/25/21	14:00	366	121.7
04/25/21	15:00	514	185.1
04/25/21	16:00	629	725.7
04/25/21	17:00	555	834.5
04/25/21	18:00	496	842.4
04/25/21	19:00	410	360.9
04/25/21	20:00	340	261.4
04/25/21	21:00	255	241.1
04/25/21	22:00	158	203.9
04/25/21	23:00	78	157.7

On April 25, 2021 the No. 3 and No. 4 Sulfur Recovery Units got contaminated with hydrocarbon carryover via the acid gas. Operations blocked in the acid gas header to the sulfur recovery units (SRUs) which overloaded the No. 4 Amine Regeneration unit (4ARU) preventing it from properly removing the H₂S in the fuel gas. The No. 5 Amine Regeneration unit was not operational at the time. Soon after, the 4ARU reboilers overpressured and relieved to the flare.



To mitigate the incident, the No. 7 Distillate Desulfurizer (7DD), No. 9 Distillate Desulfurizer (9DD), and the No. 3 Hydrobon Unit were placed on circulation in order to alleviate the H₂S load to 4ARU.

If you have any questions or need additional information, please contact Maria Aloyo at (340) 692-3781.

Sincerely,

Neil Morgan
VP, Refinery and General Manager
Limetree Bay Refining, LLC

Electronic Copy: Verline Marcellin (DPNR)